

## ABSTRACT

The present invention provides a method of carrying out an oxidation reaction catalysed by a monooxygenase enzyme and using hydrogen peroxide as an oxidant, in which reaction a low level of oxidation damage of the monooxygenase occurs, said method comprising producing the hydrogen peroxide simultaneously with the oxidation reaction, wherein the hydrogen peroxide is produced at a rate less than or equal to the rate at which it is used in the reaction or said method comprising carrying out the reaction in the presence of an H<sub>2</sub>O<sub>2</sub> or hydroxyl radical sequestering agent that controls the H<sub>2</sub>O<sub>2</sub> or hydroxyl radical concentration.